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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,273	12/02/2003	Michael A. Czayka	200047.00161	3388
21324 7590 07/25/2007 HAHN LOESER & PARKS, LLP One GOJO Plaza Suite 300 AKRON, OH 44311-1076			EXAMINER YOON, TAE H	
			ART UNIT 1714	PAPER NUMBER
			NOTIFICATION DATE 07/25/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@hahnlaw.com  
akron-docket@hotmail.com

**Office Action Summary**

Application No.

10/726,273

Applicant(s)

CZAYKA ET AL.

Examiner

Tae H. Yoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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A typo (tot eh) in lines 10-11 of page 2 is objected.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-9, 15, 16, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mitani et al (US 4,327,145).

Mitani et al teach an easily handleable sheet molding compound (B-stage) comprising impregnated glass fibers with a resin composition comprising an unsaturated polyester, polymerizable monomer (such as styrene) and peroxide, and said composition is free from thickening agents such as magnesium oxide (abstract, col. 2, lines 14-45, col. 3, lines 5-13, and col. 4, lines 9-40).

Again, with respect to an electron beam irradiation, an invention in a product-by-process is a product, not a process. See In re Brown, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and In re Thorpe, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985).

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With respect to "consisting essentially of" in claims 19 and 20, the recitation of "consisting essentially of" alone cannot overcome the rejection based on the art reciting "comprising". See *In re De Lajarte*, 337 F2d 870, 143 USPQ 256 (CCPA, 1964); When applicant contends that modifying components in the reference composition are excluded by the recitation of "consisting essentially of", applicant has the burden of showing the basic and novel characteristics of his composition – i.e. a showing that the introduction of these components would materially change characteristics of applicant's invention.

Thus, the instant invention lacks novelty.

Claims 1, 5-9, 15, 16, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Parker, Jr. (US 3,429,950).

Rejection is maintained for reason of record with following response.

Contrary to applicant's assertion, Parker, Jr. does not teach employing thickening agents such as metal oxides. Notes that only thickening agents discussed in the instant specification are metal oxides. Besides, the recited "essentially devoid of" still permits presence of some amounts of thickening agents contrary to applicant's assertion.

Claims 1, 5-9, 15, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as obvious over Parker, Jr. (US 3,429,950) in view of Parker, Jr. (US 3,300,544), JP 54120675 A or JP401251791 A.

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Parker, Jr. (US '544) teaches that B-stage is a partially crosslinked at col. 2, lines 18-29, and abstracts of JPs teach the same. Parker, Jr. (US '544) is also an inventor for the primary reference, US'950.

Thus, the cited secondary references support the examiner's position in above anticipation rejection, or it would be obvious to one skilled in the art at the time of invention to crosslink the unsaturated polyester of Parker, Jr. (US'950) with teaching of the secondary references since all teach B-stage polyester absent showing otherwise.

Claims 1-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as obvious over Mitani et al (US 4,327,145) or Parker, Jr. (US 3,429,950) in view of Mathur et al (US 6,063,864) or JP 54120675 A.

Mitani et al and Parker, Jr. teach partially crosslinked B-stage polyesters.

The invention further recites irradiation with high-energy electrons over the heat polymerization (partial curing) of Mitani et al and Parker, Jr. However, the use of electron beam source in curing unsaturated polyester is well known as taught by Mathur et al, col. 2, line 16-17 and col. 3, lines 40-45 and Lane et al, col. 8, lines 34-35. Both Mathur et al and Lane et al teach and equate various polymerization (or crosslinking) methods such as heat, UV radiation and electron beam. Furthermore, Lane et al teach that one can adjust dosage conditions at bottom of col. 8.

Contrary to applicant's assertion, JP teaches the use of irradiation in partial curing (crosslinking) of polyester to B-stage in abstract.

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It would have been obvious to one skilled in the art at the time of invention to utilize the electron beam source taught by Mathur et al or JP in Mitani et al or Parker, Jr. since irradiation with high energy electrons is well known in curing unsaturated polyester and since Mathur et al teach and equate various polymerization (or crosslinking) methods such as heat, UV radiation and electron beam and since choosing any one method would be an obvious choice and since JP teaches the use of irradiation in partial curing (crosslinking) of polyester (B-stage) and since one would know how to adjust the dosage of irradiation in order to obtain a partially cured polyester absent showing otherwise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/July 17, 2007